

Application No.: 10/681,471

Docket No.: JCLA11529

AMENDMENTIn The Claims:

Claim 1. (currently amended) A ground shield structure, suitable for use in an electronic circuit structure, the ground shield structure at least comprising:

a plurality of multi-edge ground cells, periodically, compactly, and complementarily distributed on a ground surface, wherein all the multi-edge ground cells are electrically isolated from each other, and a slot exists between the two adjacent ground cells to reduce an eddy current induced from the electronic circuit structure.

Claim 2. (original) The ground shield structure of claim 1, further comprising at least an interconnection member connecting two of the adjacent ground cells.

Claim 3. (original) The ground shield structure of claim 1, wherein the ground cells have an identical cross-sectional profile.

Claim 4. (original) The ground shield structure of claim 1, wherein the ground cells have different shape of cross-sectional profiles.

Claim 5. (original) The ground shield structure of claim 1, wherein the ground surface includes a planar surface.

Application No.: 10/681,471

Docket No.: JCLA11529

Claim 6. (original) The ground shield structure of claim 1, wherein the ground surface includes a curved surface.

Claim 7. (currently amended) A ground shield structure, suitable for use in an electronic circuit structure, the ground shield structure at least comprising:

a ground surface, comprising a plurality of slots in a multi-edge shape, wherein the slots are distributed in the ground surface by a periodic, compact and complementary arrangement without separating the ground surface into pieces.

Claim 8. (original) The ground shield structure of claim 7, wherein the slots have an identical cross-sectional profile.

Claim 9. (original) The ground shield structure of claim 7, wherein the slots have different cross-sectional profiles.

Claim 10. (original) The ground shield structure of claim 7, wherein the ground surface includes a planar surface.

Claim 11. (original) The ground shield structure of claim 7, wherein the ground surface includes a curved surface.

Application No.: 10/681,471

Docket No.: JCLA11529

Claim 12. (currently amended) A ground shield structure, suitable for use in an electronic circuit structure, the ground shield structure at least comprising:

a ground surface, comprising a plurality of multi-edge ground cells and at least an interconnection member connecting two of the multi-edge ground cells, wherein the multi-edge ground cells are distributed on the ground surface by a periodic, compact and complementary arrangement, and all the multi-edge ground cells on the ground surface compose of a single-layered ground shield, such that the ground shield structure reduces an eddy current inducted by the electronic circuit structure.

Claim 13. (previously presented) The ground shield structure of claim 12, wherein the multi-edge ground cells are portions of the ground surface.

Claim 14. (cancelled)

Claim 15. (previously presented) The ground shield structure of claim 12, wherein the multi-edge ground cells are slots of the ground surface.

Claim 16. (previously presented) The ground shield structure of claim 12, wherein the multi-edge ground cells have an identical cross-sectional profile.

Claim 17. (previously presented) The ground shield structure of claim 12, wherein the multi-edge ground cells have different cross-sectional profiles.

Application No.: 10/681,471

Docket No.: JCLA11529

Claim 18. (original) The ground shield structure of claim 12, wherein the ground surface includes a planar surface.

Claim 19. (original) The ground shield structure of claim 12, wherein the ground surface includes a curved surface.

Claim 20. (previously presented) The ground shield structure of claim 1, wherein the ground cells includes a shape being “+” - like, dumbbell-like, beehive-like, or mix of “+” – like and rectangular.

Claim 21. (previously presented) The ground shield structure of claim 7, wherein the ground cells includes a shape being “+” - like, dumbbell-like, beehive-like.

Claim 22. (previously presented) The ground shield structure of claim 12, wherein the ground cells includes a shape being “+” - like, dumbbell-like, beehive-like, or mix of “+” – like and rectangular.

Claim 23. (currently amended) A ground shield structure, suitable for use in an electronic circuit structure which comprises at least one signal transmission device, the ground shield structure at least comprising:

a ground surface, comprising a plurality of multi-edge ground cells distributed on the ground surface by a periodic, compact and complementary arrangement to reduce an eddy current

Application No.: 10/681,471

Docket No.: JCLA11529

induced from the signal transmission device, wherein all the multi-edge ground cells on the ground surface compose of a single-layered ground shield and all the multi-edge ground cells are electrically isolated from each other.

Claim 24. (previously presented) The ground shield structure of claim 23, wherein the ground cells have an identical cross-sectional profile.

Claim 25. (previously presented) The ground shield structure of claim 23, wherein the ground cells have different shape of cross-sectional profiles.

Claim 26. (previously presented) The ground shield structure of claim 23, wherein the ground surface includes a planar surface.

Claim 27. (previously presented) The ground shield structure of claim 23, wherein the ground surface includes a curved surface.

Claim 28. (previously presented) The ground shield structure of claim 23, wherein the ground cells includes a shape being "+" like, dumbbell-like, beehive-like.